



Ollscoil
Teicneolaíochta
an Atlantaigh

Atlantic
Technological
University

Capacity building to meet future challenges

Úna Parsons, Head of College Sligo &
Head of Faculty of Engineering & Design, ATU

Capacity Building to meet future challenges

Presentation Outline:

1. About ATU
2. Online & Flexible Learning at ATU
3. Relevant Online Programmes at ATU
4. ATU's mycareerpath.ie
5. Contact Details



1. ABOUT ATU

Atlantic Technological University (ATU) is one of the **largest multi-campus** universities on the island, serving a **diverse group** of learners, staff, communities and organisations from our region and further afield.



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- 1 ATU Donegal Letterkenny
- 2 ATU Donegal Killybegs
- 3 ATU Sligo St Angela's*
- 4 ATU Sligo
- 5 ATU Mayo
- 6 ATU Connemara
- 7 ATU Mountbellew
- 8 ATU Galway City

* Subject to formal incorporation of St Angela's College into Atlantic Technological University



1. ABOUT ATU

We offer a rich combination of **academic and research** excellence, **quality of life** and **opportunity** – all of which can be experienced in the most beautiful part of Ireland.



1. ABOUT ATU

- More than **22,000 students** are currently enrolled at ATU.
- Over **50%** of our students are already in the **workforce**
- **5,000** graduates in 2021
- **Courses** in science, mathematics and computing, engineering, manufacturing and construction, arts, humanities, social sciences, business and law.



2. Online & flexible learning at ATU Sligo



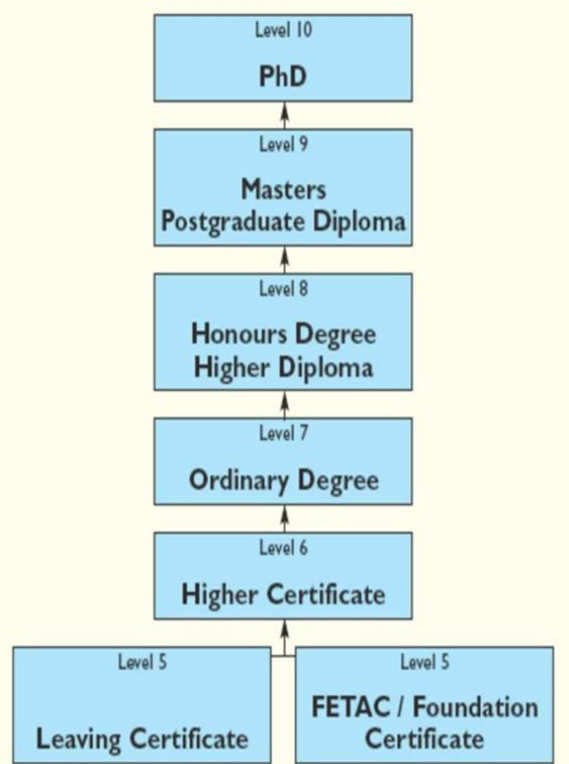
2. ONLINE & FLEXIBLE LEARNING AT ATU SLIGO

- Delivering online & flexible courses since 2002
- Over 35,000 graduates c. 5000 online learners in 2021/22
- Over 150 online programmes from Levels 6 to 9
- Accredited online qualifications matched to industry demand
- Ranked #1 Most Flexible Learning Students by Good University Guide 2021
- Winner of Irish Construction Excellence Award in 2022 – ‘Third Level – CPD’ category

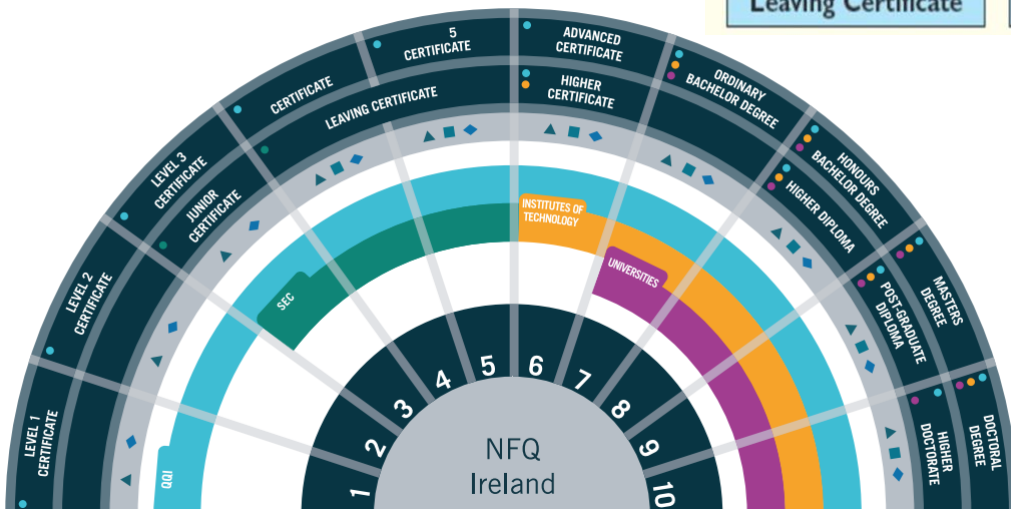


2. ONLINE & FLEXIBLE LEARNING AT ATU SLIGO

National Framework of Qualifications



- Part time study - 30 Credits Per Year/Stage
- Recognition of prior learning for 'non-standard' applicants.
- Live & recorded online lectures
- Access to Moodle Virtual Learning Environment
- ATU Sligo Workshops (twice per semester)
- Exams Sligo/Athlone/Online Proctor
- Projects submitted on-line via Turnitin – a plagiarism detection service



'Critical' shortage of engineering graduates

55% decrease in civil and building engineering graduates over the last five years

© Wed, Mar 6, 2019, 17:26

Carl O'Brien



Engineers Ireland says the number of graduates is expected to be much larger to meet current demand.

As Chairman of Construction Sector Innovation and Digital Adoption, PJ Rudden tells Irish magazine that a matter of great concern for him is the skills gap within the industry.

So, what's the problem?

Irish construction industry targeting students to avert future skills shortages

A sharp fall in civil and building engineering graduates over the last five years could undermine the delivery of key Government projects, it has been warned.

A new report finds that 6,000 engineers will be needed to fill jobs in the next year - and just 13pc of graduates are women.

SUPPLY OF CIVIL AND BUILDING ENGINEERS MUST DRAMATICALLY INCREASE TO MEET COUNTRY'S CURRENT AND FUTURE NEEDS, NEW ENGINEERS IRELAND REPORT STATES

IRISH TECH NEWS x MARCH 7, 2019

Project Ireland 2040

Building Ireland's Future

September 2020

Building Future Skills

The Demand for Skills in Ireland's Built Environment Sector to 2030

Table 3.1: Shortage Indicators for 'Skills' of the Built Environment

| Broad Occupational Group | Shortage indicator | Occupation Shortage |
|---|--------------------|--|
| Civil engineers and Construction Project Managers | ● | - Civil Engineer - Construction Project Managers |
| Architects and Town Planners, Architectural Technologists and Surveyors | ● | - Quantity Surveyors |
| Bricklayers and Plasterers | ● | |
| Plumbers | ● | |
| Carpenters and joiners | ● | - Carpenters |
| Painters and Decorators | ● | |
| Other Construction Trades | ● | - Glaziers - Steel Erectors/fixers - Curtain Wallers |
| Construction Operatives and Elementary | ● | - Scaffolders - Pipe Layers |
| Electrical and Electronics Trades etc | ● | - Electricians |
| Mobile Machine Drivers and operatives | ● | - Construction Site Drivers |

Source: National Skills Bulletin (SOLAS, 2019)

project managers are emerging although the numbers required are likely to be small. With declining output from the education and training system, the number of graduates is not expected to be enough to meet growing demand. These shortages could therefore be exacerbated in future years.

17,100 10.6



IRISHTIMES.COM

Employers turning to new pathways to tempt women and school leavers to join them

Engineering graduates in Ireland

Civil Engineering graduates in Ireland

Leads of Department in NUIG, TCD and UCC.

The engineering profession is responsible for developing the built environment. The profession in Ireland has recovered well following the national economic downturn. The Ulster Bank

Engineer's body warns of shortage of skills

2019 18:50



For people...
relying,
The
on
is facing



'55% decrease in civil and building engineering graduates over the last five years was 'a particular cause of concern'



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3. Relevant online programmes at ATU Sligo



3. RELEVANT ONLINE PROGRAMMES AT ATU SLIGO



3. RELEVANT ONLINE PROGRAMMES AT ATU SLIGO



Partners in Development & Accreditation



Road & Transportation Programmes



| Title | Course type | Level | Mode of Study | Duration | Campus |
|--|--------------|-------|---------------|----------|--------|
| Road and Transport Engineering Master of Engineering | Postgraduate | 9 | Part Time | 3 Years | Online |
| Road and Transport Engineering Postgraduate Diploma in Engineering | Postgraduate | 9 | Part Time | 2 Years | Online |
| Road Engineering and Design Certificate | Postgraduate | 9 | Part Time | 1 Year | Online |
| Road Maintenance Engineering & Network Management Postgraduate Certificate | Postgraduate | 9 | Part Time | 1 Year | Online |
| Road Safety Audit and Engineering Certificate | Postgraduate | 9 | Part Time | 15 Weeks | Online |



Road & Transportation Programmes



| | | | | | |
|---|----------------------------|---|-----------|----------------------|-------------|
| Bridge Engineering Certificate | Postgraduate | 9 | Part Time | 1 Year | Online |
| Civil Engineering Higher Diploma in Engineering | Professional Development | 8 | Part Time | 1 Year | Galway City |
| Geotechnical / Structural Engineering Master of Engineering | Postgraduate | 9 | Part Time | 2 Years / 3 Years | Online |
| Geotechnical and Structural Engineering Certificate | Postgraduate, Springboard+ | 9 | Part Time | 1 Year | Online |

Springboard+

- 90% Funding for those in employment
- Applications submitted through www.springboardcourses.ie

3. RELEVANT ONLINE PROGRAMMES AT ATU SLIGO

PG Cert, PG Diploma & MEng in Road and Transport Engineering

| MODULE TITLE | SEMESTER | CREDITS | LECTURE HOURS/ WEEK | POST GRAD CERTIFICATE | POST GRAD DIPLOMA (PGD) | MASTER OF ENGINEERING (MENG) |
|--|----------|---------|------------------------|--|--|--|
| GEOTECHNICAL ENGINEERING I | 1 | 5 | 2 | Stage/Year 1 Cert in Road Maintenance Eng & Network Management (30 credits) (€4,500) | Stage/Year 1 & 2 Post Grad Diploma in Road & Transport Engineering (60 credits) (€9,000) | Stage/year 1, 2 & 3 MEng in Road & Transport Engineering (90 Credits) (€12,000) |
| STRUCTURAL ASSESSMENT & INSPECTION OF BRIDGES | 1 | 5 | 2 | | | |
| TRANSPORTATION PLANNING | 1 | 5 | 1 | | | |
| ROAD PAVEMENT DESIGN & MANAGEMENT | 2 | 5 | 2 | | | |
| CONSTRUCTION CONTRACTS & LIABILITIES | 2 | 5 | 1 | | | |
| TRAFFIC CONTROL & SAFETY | 2 | 5 | 1 | | | |
| DRAINAGE SYSTEMS DESIGN & FLOOD MANAGEMENT | 3 | 5 | 2 | Stage/Year 2 (30 credits) (€4,500) | | |
| RESEARCH METHODS | 3 | 5 | 2 | | | |
| DESIGN OF BRIDGE STRUCTURES | 3 | 5 | 2 | | | |
| ROAD & TRANSPORT SCHEME DESIGN | 4 | 5 | 2 | | | |
| GEOTECHNICAL ENGINEERING II | 4 | 5 | 2 | | | |
| PROJECT MGT & APPRAISAL | 4 | 5 | 1 | | | |
| MENG RESEARCH DISSERTATION | 5,6 | 30 | N/A | Stage /Year 3 30 Credit Dissertation (€3,000) | | |



3. RELEVANT ONLINE PROGRAMMES AT ATU SLIGO



Certificate in Bridge Engineering L9

Special Purpose Award: (20 ECTS) – Semester 1 & 2 modules on MEng.



| MODULE TITLE | SEMESTER | CREDITS | LECTURE HOURS/ WEEK | POST GRAD CERTIFICATE |
|---|----------|---------|---------------------|---|
| GEOTECHNICAL ENGINEERING I | 1 | 5 | 2 | Stage/Year 1 & 2 Cert in Road Engineering & Design (20 credits) (€3,000) |
| STRUCTURAL ASSESSMENT & INSPECTION OF BRIDGES | 1 | 5 | 2 | |
| DESIGN OF BRIDGE STRUCTURES | 4 | 5 | 2 | |
| GEOTECHNICAL ENGINEERING II | 4 | 5 | 2 | |

**3. RELEVANT
ONLINE
PROGRAMMES
AT ATU SLIGO**



Certificate in Road Safety Audit and Engineering L9
Special Purpose Award: (15 ECTS) – One Semester (Jan – May)

- **Modules:** Principles of Road Safety Engineering & Audit and Road Safety
- **Projects:** Mix of online lectures & workshops and site audits
- LA learners funded by TII – not based on MEng modules
- Meets academic requirement for Certificate of Competency – RSIM



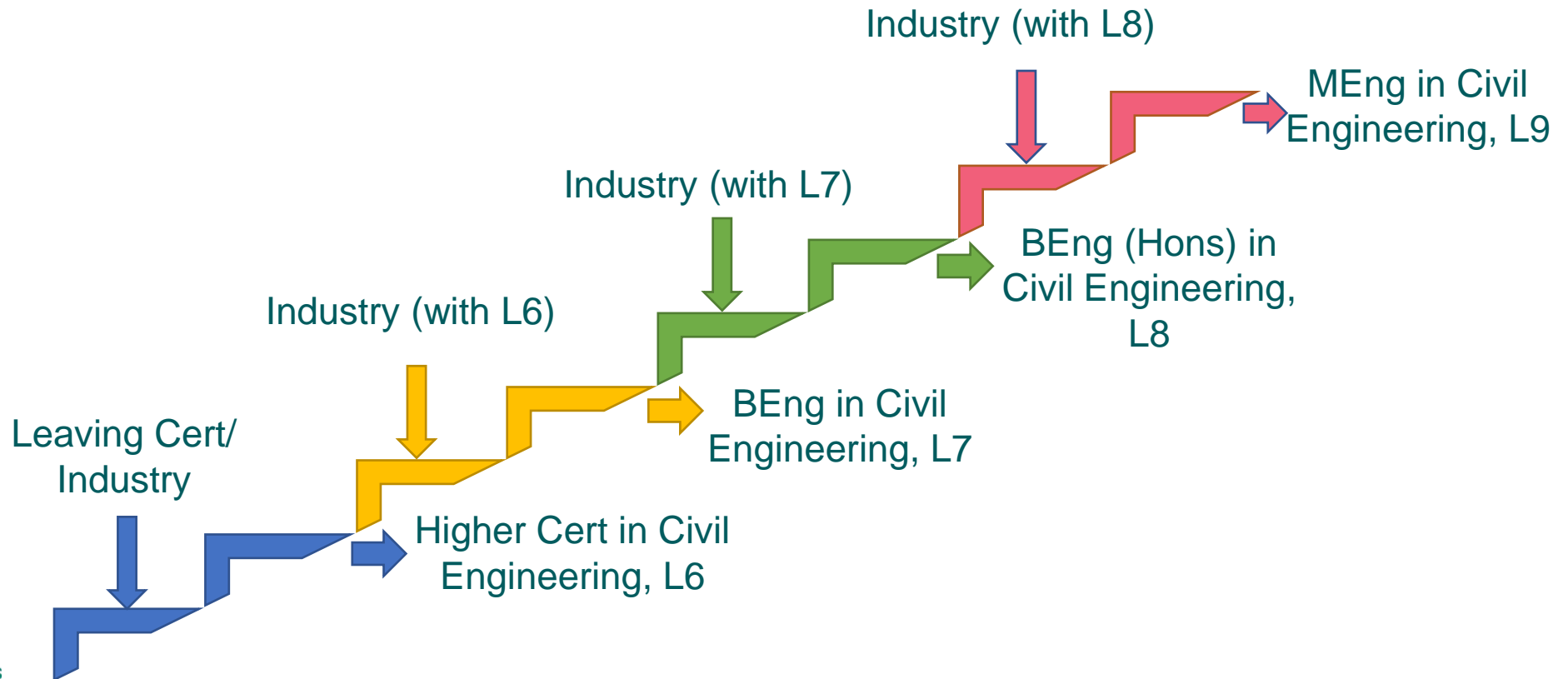
3. RELEVANT ONLINE PROGRAMMES AT ATU SLIGO

FUTURE - Civil Engineering Apprenticeship

Consortium Steering Group

Apprenticeship in Civil Engineering – L6/L7 and L8/L9 streams in conjunction with industry, SOLAS and Engineers Ireland. Employer-based degree programmes. Planned 2023 start.

Steps to Success



FUTURE - Certificate in Active and Sustainable Travel Design L9 (possible 2023 start)

- Special Purpose Award
- Currently under development in conjunction with
 - DoT, LASNTG, IPI, RIAI and other stakeholders



4. ATU's MyCareerPath.ie



4. ATU's
MYCAREERPATH.IE



**ATU EXTERNAL SERVICE FOR CAREERS
AND LEARNING PATHWAYS, INCLUDING
RECOGNITION OF PRIOR LEARNING**



*Transforming how people interact
with higher education by removing
barriers to education for lifelong
learners and employers.*



Welcome to The Learner Section

If you are at a crossroads in your career, our advisors will help you find the learning path to reach your career and employability goals.



1

REGISTER



Register with our career and learning pathway advisors

Name *

Email *

2

ENGAGE



Book a Video Meeting

Choose a time to meet with one of our Career & Learning Pathway Advisors to find the right path for you.

3

ACCESS



Access Our Platform

Access our platform of interactive tools, career assessments and short e-learning courses to develop your skills at your own pace.

Log In

Welcome to The Employer Section

Upskill your workforce and increase employee retention by contacting our team.



1

ENGAGE



Engage with mycareerpath.ie Business Liaison by completing the form below.

2

IDENTIFY



We will work with you and your employees to identify up-skilling and training needs.

3

DEVELOP



Develop career Learning pathways via existing ATU customised courses and readymade e-learning material.

Are you a Learner?

Looking to further develop your career and learn new skills...

[CLICK HERE](#)

Are you an Employer?

Looking to further develop your team and develop new skills...

[CLICK HERE](#)

The screenshot shows the mycareerpath.ie website. At the top left is the logo. A navigation menu includes Dashboard, Career Pathways, Tools/Assessments, RPL, Advice, ATU Courses, and Employers. A main banner features a 'LATEST GRAD & STUDENT OPPORTUNITIES – APPLY NO...' section with a 'LAUNCH' button and an image of people in a meeting. Below this is a 'Welcome Bridie' section with a search bar containing the text 'Search e-learning topics: try networking, strengths, interview...' and a 'SEARCH' button. A grid of eight interactive tool cards is displayed, each with a title, image, and brief description:

- CAREER LEARNING PATHWAYS**: Supported series of connected steps and programmes to enable further education.
- YOUR SKILLS & PREFERENCES**: Your strengths & preferences & the behaviours employers look for.
- CAREER POSSIBILITIES**: Career options, self-employment & how to build experience.
- CHOOSING AN ATU COURSE**: Courses available within the ATU that are right for you!
- RECOGNITION OF PRIOR LEAR...**: (Image of a laptop and calculator)
- PREPARING TO STUDY**: (Image of an abacus)
- CVs & APPLICATIONS**: (Image of a green sign with 'CV')
- CAREER WELL-BEING**: (Image of people walking outdoors)

- Interactive Tools
- Career Assessments
- E-learning Courses
- Recognition of Prior Learning (RPL)
- ATU Courses
- Mentoring

5. CONTACT DETAILS



Thanks for listening!

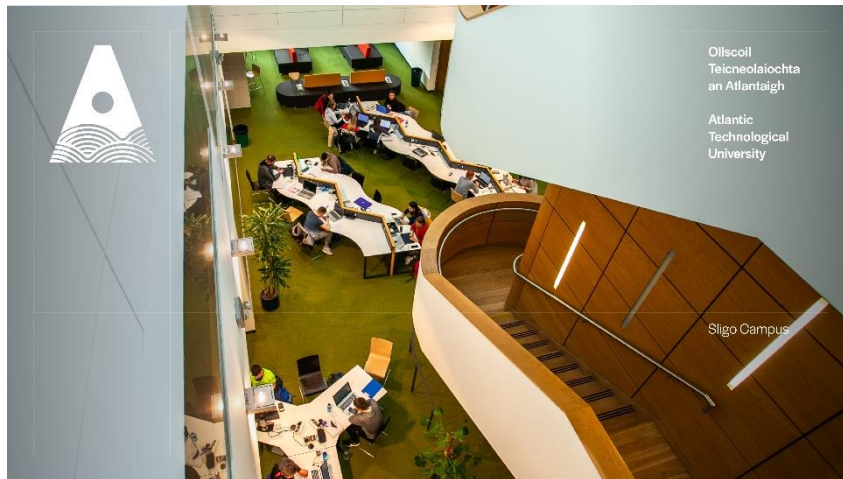
Any questions please contact:

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